

Commonwealth of Kentucky
Division for Air Quality
EXECUTIVE SUMMARY

FINAL

Conditional Major, Construction / Operating

Permit: F-05-027 Revision 1

Interplastic Manufacturing Company

Fort Wright, KY 41015

November 30, 2006

Joshua J. Higgins, Reviewer

SOURCE ID: 21-117-00086

SOURCE A.I. #: 2466

ACTIVITY ID: APE20050001

SOURCE DESCRIPTION:

Interplastic Manufacturing Company (Interplastic) operates a synthetic resin manufacturing facility in Kenton County, Kentucky. Raw materials, either charged from powder handling systems or from various raw material storage tanks (SEU 8, 13, 14, 15, 16, 20, 21, 22, 23, 24, 27, 28, 36, 40, 41, and 43), are processed in three reactor vessels, or Process Kettles (PK#1 (SEU 57), PK#2 (SEU 58), and PK#3 (SEU 101)), to produce an alkyd. The reactions can take place at both atmospheric and/or elevated pressures, and can take from 12 to 48 hours. The reactors can be heated with hot oil from any one of three sources (SEU 10, 33, and 102, as required), and are typically supplied with inert gas from the Inert Gas Generator (SEU 109). While still hot, the alkyd is transferred into one of six Thinning Kettles (TK#1 or #2 for PK#1, TK#3 or #4 for PK#2, and TK#5 or #6 for PK#3), and thinned with styrene (one product is thinned with acetone, but acetone is neither a VOC or a HAP). Once thinned, the product is considered a "base resin" which is either sold "as is" or further blended to customer specifications. Approximately 30% of the resin is sold "as is," while the remaining 70% is either stored on site in Resin Storage Tanks (SEU 4, 5, 19, 45, 106, and 107) or further blended in one of numerous blend tanks (SEU 11, 12, 17, 18, 29, 30, 34, 35, 37, 44, 48, 55, 104, 105, 110, 111, 112, 113, 115, or 116). Finally, the resin is packaged in one of two tank truck loading areas (SEU 39 or 119), one of two Automatic Drumming Stations (SEU 117 or 118), or one of three dual-purpose small loading areas (SEU 44, 115, or 116).

Although numerous construction and operating permits and "no permit required" letters were issued in the past, the source has never received a source-wide operating permit. Interplastic was initially on the Division's original list of Title V sources, and submitted a Title V application on December 16, 1998. After numerous Notices of Deficiency (NOD's) issued based on the Title V application, and as a result of a court-ordered consent decree, Interplastic submitted a completely revised and updated application on February 15, 2005. The revised application requested operating and emission limits, and Conditional Major source status covered under 401 KAR 52:030. A draft determination (F-05-027), based on the February 15, 2005 application, was issued December 16, 2005.

Revision 1:

The permit was redrafted (and renamed F-05-027 Revision 1 to prevent confusion with the previous draft) in order to incorporate the following changes:

1. A significant revision was received March 9, 2006, prior to issuance of the final permit, with additional information received April 17, 2006 as a result of a NOD, to install a third 4-drum hot

box. The application and additional information indicated that all hot boxes vent to the thermal oxidizers, and incorporated the destruction efficiency into the potential to emit calculations, therefore requiring significant revision procedures.

2. Thirty-two resin pumps are excluded from the **Compliance Demonstration** requirements based on 40 CFR 60 Subpart VV as a result of revised pipeline equipment fugitive emission calculations received May 5, 2006, and July 20, 2006.
3. As a result of increased pipeline fugitive emissions depicted by the May 5 and July 20, 2006 submittals, the required destruction efficiency for the thermal oxidizers was revised.

PUBLIC, EPA, AND AFFECTED STATE REVIEW:

On September 20, 2006, the public notice on availability of the draft permit and supporting material for comments by persons affected by the plant was published in *The Enquirer* in Covington, Kentucky (the notice was originally supposed to run on August 16, 2006, but there was either a communication error between the KY Press Association and *The Enquirer*, or simply a mistake by *The Enquirer*). In addition, notification of the issuance of the draft permit was sent to the U.S. EPA and affected states, Ohio and Indiana, on August 7, 2006 via e-mail. The public comment period expired 30 days from the date of publication.

Comments were received from Jack C. Bender of Greenbaum Doll & McDonald PLLC on behalf of Interplastic Manufacturing Company on October 20, 2006 (the comment submittal is stamped "Received October 23, 2006", but the Permit Support Section supervisor ensured the reviewer that the comments were here at the Division on the 20th). Minor changes were made to the permit as a result of the comments received, however the Division has concluded that the proposed operation will comply with all air quality regulations and requirements. The permit is now being issued final.